# Math 416 - Abstract Linear Algebra <br> Fall 2011, section E1 <br> Additional problems 

## Section 6.6

A6.6.1. Let $\left\{w_{1}, \ldots, w_{n}\right\}$ be a basis of $\mathbb{R}^{n}$ and let $\left\{v_{1}, \ldots, v_{n}\right\}$ be the orthonormal basis obtained from it by the Gram-Schmidt process.
Show that $\left\{w_{1}, \ldots, w_{n}\right\}$ and $\left\{v_{1}, \ldots, v_{n}\right\}$ have the same orientation.

